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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,432	02/07/2007	Remi Noirot	612.46212X00	2550
20457 7590 01/24/2008 ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			EXAMINER TRAN, BINH Q	
			ART UNIT 3748	PAPER NUMBER
			MAIL DATE 01/24/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/580,432

Applicant(s)

NOIROT ET AL.

Examiner

BINH Q. TRAN

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 05/24/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

Receipt and entry of Applicant's Preliminary Amendment dated May 24, 2006 is acknowledged.

### *Specification*

The disclosure is objected to because of the following informalities: The following headings of the specification are missing, such as

- *Background of the Invention.*
- *Brief Summary of the Invention.*
- *Brief description of the drawing(s)* as required by 37 FR 1.74.
- *Detailed Description of the drawing(s).* Appropriate correction is required

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

***Claims 1-12 are rejected under 35 U.S.C. 102 (e) as being anticipated by Van Nieuwstadt et al. (Van Nieuwstadt) (Patent Number 6,988,361).***

Regarding claims 1 and 8, Van Nieuwstadt discloses a method for regenerating a particle filter (26) built into an exhaust line (Fig. 1) of an internal combustion engine (10), with the exhaust gases passing through the filter from an inflow face to an outflow face (Fig. 1), characterized in that, during filter regeneration: the internal temperature (T1, T2) of at least two regions of the filter (12) is monitored; the oxygen level of the exhaust gases is reduced when at least one of the temperatures monitored is greater than a critical temperature; the oxygen level of the exhaust gases is increased to continue filter regeneration when all the temperatures monitored are less than the critical temperature (e.g. See col. 6, lines 20-67; col. 7, lines 1-67; col. 8, lines 1-43).

Regarding claims 2 and 9, Van Nieuwstadt further discloses the internal temperature of one region of filter (12) is monitored near its inflow face (e.g. See col. 7, lines 4-67; col. 8, lines 1-30).

Regarding claims 3 and 10, Van Nieuwstadt further discloses that the internal temperature of one region of filter (12) is monitored near its outflow face (e.g. See col. 7, lines 4-67; col. 8, lines 1-30).

Regarding claims 4 and 11, Van Nieuwstadt further discloses the internal temperature of a middle region of filter (12) is monitored (e.g. See col. 7, lines 4-67; col. 8, lines 1-30).

Regarding claims 5 and 12, Van Nieuwstadt further discloses wherein desulfation of a NOx trap (72) is performed, characterized in that the internal temperature of at least two regions of filter (12) is monitored after desulfation of trap (e.g. See col. 7, lines 4-67; col. 8, lines 1-30).

Regarding claims 6, Van Nieuwstadt further discloses the oxygen level of the exhaust gases is reduced by operating the engine in rich mode (e.g. See col. 7, lines 4-67; col. 8, lines 1-30).

Regarding claims 7, Van Nieuwstadt further discloses the oxygen level of the exhaust gases is increased by operating the engine in lean mode (e.g. See col. 7, lines 4-67; col. 8, lines 1-30).

***Claims 1-4, and 6-11 are rejected under 35 U.S.C. 102 (b) as being anticipated by Brighton et al. (Brighton) (Patent Number 4,651,524).***

Regarding claims 1 and 8, Brighton discloses a method for regenerating a particle filter (14, 204) built into an exhaust line (Fig. 1) of an internal combustion engine, with the exhaust gases passing through the filter from an inflow face to an outflow face (Fig. 1), characterized in that, during filter regeneration: the internal temperature (125) of at least two regions of the filter (14, 204) is monitored; the oxygen level of the exhaust gases is reduced when at least one of the

temperatures monitored is greater than a critical temperature; the oxygen level of the exhaust gases is increased to continue filter regeneration when all the temperatures monitored are less than the critical temperature (e.g. See col. 7, lines 10-67; col. 8, lines 1-16).

Regarding claims 2 and 9, Brighton further discloses the internal temperature of one region of filter (14, 204) is monitored near its inflow face (e.g. See col. 9, lines 30-67; col. 10, lines 1-16).

Regarding claims 3 and 10, Brighton further discloses that the internal temperature of one region of filter (14, 204) is monitored near its outflow face (e.g. See col. 9, lines 30-67; col. 10, lines 1-16).

Regarding claims 4 and 11, Brighton further discloses the internal temperature of a middle region of filter (14, 204) is monitored (e.g. See col. 7, lines 4-67; col. 8, lines 1-30).

Regarding claims 6, Brighton further discloses the oxygen level of the exhaust gases is reduced by operating the engine in rich mode (e.g. See col. 7, lines 10-67; col. 8, lines 1-16).

Regarding claims 7, Brighton further discloses the oxygen level of the exhaust gases is increased by operating the engine in lean mode (e.g. See col. 7, lines 10-67; col. 8, lines 1-16).

### ***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of five patents:

Todoroki et al. (Pat. No. 7054734), Nagaoka et al. (Pat. No. 7207171), Saitoh et al. (Pat. No. 7254940), Sato et al. (Pat. No. 4450682), and Stobbe et al. (Pat. No. 5195319) all disclose an exhaust gas purification for use with an internal combustion engine.

*Conclusion*

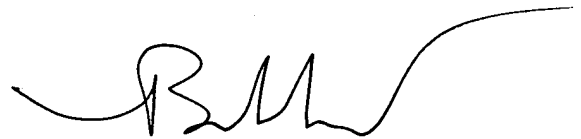
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (571) 272-4865.

The examiner can normally be reached on Monday-Friday from 8:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (571) 272-4859. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BT  
January 21, 2008



Binh Q. Tran  
Patent Examiner  
Art Unit 3748